## NEW SPECIES OF NORTH AMERICAN RHYN-CHOPHORA (COLEOPTERA)

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#### Pissodes robustus Van Dyke, new species

Robust, reddish brown, pronotum with the usual two small patches of white scales, a few similar scales in front and more numerous ones along the sides, scutellum completely clothed with white scales, the elytra with rather large subbasal patches of light buff scales, obliquely placed from the third to seventh interval, and very large patches of white and buff scales at apex of elytral declivity, the latter broadly margined with black, the underside and legs more or less ornamented with white scales. Head coarsely, densely punctured in front, a deep fovea between eyes; beak shorter than prothorax, very broad and robust, coarsely, densely punctured at base, more finely apically. Prothorax slightly broader than long, almost as broad as elytra, very convex, hind angles obtuse and slightly rounded, sides broadly arcuate and gradually narrowed toward apex, the disk coarsely, closely punctured and with small carina at middle. Elytra twice as long as prothorax, third and fifth intervals considerably elevated, the seventh to a lesser degree, the fifth tuberculate posteriorly, the striæ very coarsely, not closely punctured. Length 6 mm. from base of beak to tip of elytra, beak 1.75 mm., breadth 2.5 mm.

Holotype (No. 2464, Mus. Calif. Acad. Sci.) and paratype in my collection, taken by Mr. A. H. Muzzall at Camp. 20, Hammond Lumber Company, Humboldt County, California, June and July, 1916. The host tree was not identified.

This species has a color pattern very close to that of *Pissodes terminalis* Hopping,<sup>1</sup> but it differs greatly otherwise, for it has a more robust and shorter rostrum and the hind angles to prothorax obtuse and somewhat rounded, not sharply right angled. In Hopkins' Monograph of Pissodes,<sup>2</sup> it would fall in his key to the species very close to *similis* Hopk., but can be separated from the same by being larger with the rostrum and prothorax both more robust, the latter with hind angles obtuse and somewhat rounded, the elytra with alternate intervals more elevated and color pattern more conspicuous. From *Pissodes barberi* Hopk., which occurs in its territory, it differs definitely by being

<sup>&</sup>lt;sup>1</sup> A New Species of the Genus Pissodes (Coleoptera), by Ralph Hopping, Can. Ent. Vol. LII (June, 1920), p. 133.

<sup>&</sup>lt;sup>2</sup> Contribution toward a monograph of the bark weevils of the Genus Pissodes, by A. D. Hopkins, Tec. Ser. No. 20, pt. 1, U. S. D. A., November 11, 1911.

reddish brown, not black, with the anterior elytral color patch rather large, not indistinct, and the posterior very large, not small. *Pissodes costatus* Mann., which also simulates it, lacks the very robust rostrum and prothorax, the somewhat rounded hind angles to latter, the rather large anterior color patch, and in addition has the posterior spot anterior to the declivity.

## Pissodes ochraceus Van Dyke, new species

Robust, reddish brown, pronotum with the usual two patches of white scales and in addition a few buff scales in front, elytra with a subbasal patch of ochre colored scales, of moderate size, and a large transverse patch of scales of the same color, surrounded by a black margin, anterior to the elytral declivity, and a few scattered white scales both above and beneath. Head moderately coarsely, densely punctured in front, a shallow fovea between the eyes; beak equal in length to prothorax, robust, coarsely, densely punctured at base, finer apically. Prothorax slightly broader than long, almost as broad as elytra, very convex, hind angles obtuse and blunt, sides broadly and evenly arcuate until near apex where suddenly constricted, disk coarsely, closely punctured and with fine carina at middle. Elytra twice as long as prothorax, third and fifth intervals distinctly elevated, the seventh to a lesser degree, the fifth tuberculate posteriorly, the striæ coarsely, not closely punctured. Length 6.5 mm. from base of beak to tip of elytra, beak 2 mm., breadth 2.5 mm.

Holotype (No. 2465, Mus. Calif. Acad. Sci.) and one paratype in my collection, taken by myself at **Meadow Valley**, **Plumas County**, **California**, June 6, 1924. The host tree could not be located.

The distinctive color pattern of this species readily separates it from all of our other species. Structurally, it somewhat resembles the preceding but has a slightly narrower and more cylindrical beak, less coarsely punctured, more suddenly narrowed prothorax in front, and the posterior elytral maculation anterior to the basal declivity. In this latter regard as well as by its general shape, it closely approaches *Pissodes costatus* Mann. and is no doubt somewhat related to it.

# Anculopus Van Dyke, new genus

Moderately elongate and somewhat flattened; beak free, not flexed, moderately robust, somewhat shorter than prothorax, slightly curved, suddenly constricted at base and just behind eyes, the apical portion slightly wider than basal, antennæ inserted toward sides one-third from apex and with insertion visible from above, the scrobes deep, bent backward and beneath to inferior margin of eyes where

somewhat dilated, mandibles biemarginate and tridentate at tip; eyes not large but protuberant and slightly angulated at apex; antennæ with first segment of funicle longer than broad, the four following transverse and gradually broader, the terminal forming a compact fusiform club. Prothorax longer than broad, the prosternum slightly emarginate in front, the front coxæ narrowly separated by prosternal spine. First and second ventral segments each considerably longer than third and fourth united, the triangular suture separating them finely yet distinctly defined throughout. The femora moderately clavate, tibiæ rather long, curved near apex, with corbels and a long oblique claw at apex which is dilated and ciliated basally.

Genotype, Anculopus foveatus Van Dyke.

This genus undoubtedly belongs very near *Paraplinthus* and as such within the tribe Hylobiini as defined by LeConte and Horn.<sup>3</sup> The more restricted tribe given by Blatchley and Leng <sup>4</sup> would not receive it because of the distinct though narrow separation of the front coxæ though it possesses all of the other characters called for. I believe that the Pissodini should be kept distinct from the Hylobiini as has been done by the latter workers, but I also believe that the second tribe should be extended so as to admit this genus, for it without doubt belongs here. From *Paraplinthus* and other members of the tribe, it differs by the narrow separation of the front coxæ as well as by the peculiar stalk-like formation of the eyes, the latter character separating it from all weevils which might be confused with it.

# Anculopus foveatus Van Dyke, new species

Somewhat elongate, slightly flattened above; black, the rostrum, antennæ and legs rufopiceous. Head with basal portion smooth and shining, rostrum coarsely, shallowly and sparsely punctured basally, more finely, distinctly and closely apically. Prothorax distinctly longer than broad, apex truncate above, base slightly arcuate, sides broadly arcuate, constricted in front, disk moderately convex, a narrow and smooth longitudinal carina at middle, elsewhere opaque and deeply pitted or foveate, the foveæ well spaced and with a minute golden scale at the bottom of each. Elytra almost twice as long as prothorax and distinctly wider, elongate elliptical, moderately convex, the striæ defined by a series of very large, deep foveæ, somewhat closely placed, the intervals narrow and sinuate in front, broader and elongate tuberculate at sides and rear, the general sur-

4 Rhynchophora or Weevils of Northeastern America, by W. S. Blatchley and C. W. Leng, Indianapolis (1916), p. 139.

<sup>3</sup> Classification of the Coleoptera of North America, by John L. LeConte and George H. Horn, Smithsonian Misc. Coll., No. 26 (1883), pp. 468-9.

face opaque like prothorax and with small golden scales at the bottom of each fovea and sparsely grouped on the summits of the tubercles. Beneath dull and coarsely but more shallowly foveate than above, the last ventral segment and legs more finely and closely punctured, all punctures with golden scales as above. Femora unarmed. Length including beak, 6 mm.; breadth, 2 mm.

Holotype (No. 2466, Mus. Calif. Acad. Sci.), a unique in my collection, taken by myself at **Humptulips**, **Washington**, May 28, 1914.

This deeply pitted species superficially resembles the European *Epipolacus* (*Plinthus*) caliginosus (Fabr.) and some of the more robust Cossoninæ, but no weevil that we have in this country. It no doubt has habits somewhat similar to *Paraplinthus carinatus* (Mann.), for it was found in deep coniferous woods just as that is.

## Acmægenius granicollis Van Dyke, new species

Robust, black, subopaque, sparsely clothed with rigid hair, moderately dense and suberect on elytra, and with a few scattered white scales. Head somewhat shining, coarsely, densely punctured; beak broad, deeply grooved above, with less defined lateral grooves, and scrobe deep and broad to lower margin of eyes; antennæ less compact than in hylobinus and with second funicular segment proportionally longer. Prothorax as long as broad, hardly narrower at apex than base, sides moderately arcuate, disk convex, densely punctured and with intervals elevated into shining granules or small irregular tubercles. Elytra oval, almost twice as wide as prothorax and about two and a half times as long, disk very convex, striæ coarsely, moderately closely punctured, intervals vaguely convex and rather densely, irregularly punctured. Beneath rather densely, moderately finely punctured and rugose. Length including beak, 10 mm.; breadth, 4.25 mm.

Holotype (No. 2469, Mus. Calif. Acad Sci.), a unique in my collection from Carbon County, Wyoming.

This species superficially looks like some of the smaller, more rubbed specimens of the only other species of the genus, hylobinus, but it definitely differs by having a prothorax that is evidently granulate above, merely punctate in the other, as long as broad, whereas broader in the other, and with the apex hardly narrower than base in contrast to a much narrower apex in the other; with the scrobe almost touching the eye, while it does not in the other; and with the underside evidently rugose. In my series of fifteen specimens of hylobinus from southeastern Oregon and northeastern California, there is con-

siderable variation especially as regards the distinctness of punctation of the elytral intervals, but none of them approach the other species in regard to the characters mentioned as defining it.

#### Trichalophus brunneus Van Dyke, new species

Large and robust, black, upper surface clothed with small cupreous brown scale-like hair, interrupted here and there along the line of the striæ, and with a conspicuous patch of silvery scale-like hairs along the sides of prothorax, a rounded patch on the disk of each elytra one-fourth distance from the base and a double patch on the sides of the elytral declivity on what would correspond to the fifth and sixth intervals, also a few small patches defining the lateral striæ, the underside with the pro-and mesosternum densely covered with brownish white scales, the abdomen with a few similar scales at sides, elsewhere finely pilose. Head with deep groove on upper surface of rostrum, lateral grooves moderately deep and triangular and the scrobe deep as usual. Prothorax slightly broader than long, evidently transversely impressed near apex, sides slightly arcuate in front of middle, disk evenly convex, moderately coarsely, densely punctured and finely granulate, a fine longitudinal carina at middle with a small fovea in front. Elytra about three times as long as prothorax and not quite twice as wide, very convex, apical declivity abrupt, apices divergent and dentate, discal striæ vague, lateral faintly impressed. Beneath with outer hind margin of fourth ventral segment dentate as in didymus and constrictus. Length including rostrum, 13 mm.; breadth, 5.5 mm.

Holotype (No. 2470, Mus. Calif. Acad. Sci.), a unique in my collection, taken by myself in the Yakima Indian Forest Reserve, altitude 3000 feet, on the east slope of **Mount Adams**, Washington, July 1, 1925.

This large and handsome species with the four silvery elytral spots standing out more conspicuously than in any of the other species against the rich coppery brown background, should make it readily recognizable. In LeConte's table <sup>5</sup> it would come close to *constrictus* (Lec.).

In this connection I wish to state that my series of specimens seem to prove that didymus (Lec.) and constrictus (Lec.) are but phases of the same thing as was surmised by LeConte. Both are often found in the same territory. These two also possess along with brunneus, a very prominent tooth on the outer posterior margin of the fourth ventral segment, a character which is not present in the other species.

<sup>5</sup> The Rhynchophora of America, North of Mexico, by John L. LeConte and George H. Horn, Proc. Am. Phil. Soc., XV (1876), p. 119.

#### TRICHALOPHUS FOVEIROSTRIS Chittenden 6

This insect belongs, I believe, in the genus *Plinthodes* Lec. rather than in *Trichalophus*. I have had several specimens of it in my collection for many years. They were taken in the coniferous forests on the top of Mount Mitchell and the adjacent peaks of the Black Mountains of North Carolina, during June, by Mr. William Beutenmueller and myself.

This species is smaller and the females more robust than taniatus. In addition it is brown in color, with a more general dispersal of scale-like hair, has a shorter rostrum with shorter and broader lateral grooves, more prominent eyes, more finely rugose pronotum, narrower and slightly convex elytral intervals which are also more finely rugulose, and the third and fourth ventral segments broader. In some ways it strongly suggests some of the species of *Trichalophus*, especially as regards its size, color and vestiture, but its generic characters are eminently those of *Plinthodes*.

#### Phloophagus californicus Van Dyke, new species

Elongate, subparallel, smooth and shining, rufopiceous. Head with eyes evidently protuberant, rostrum slightly longer than one-half length of prothorax, robust, distinctly and sparsely punctured; antennæ with first segment of funicle evidently longer than broad, second to seventh closely united, transverse and gradually broader, the club elliptical. Prothorax slightly longer than broad, sides rather evenly arcuate, constricted near apex, disk rather deeply, coarsely punctured, the punctures separated by a distance equal to their own diameter, finer near anterior margin. Elytra twice as long as prothorax, barely wider, sides parallel for basal three-fourths, broadly rounded to apex, striæ deep, rather coarsely, closely punctured, intervals perceptibly convex and crenulate, with a single series of fine punctures, the two outer longer intervals more or less finely carinate, the outermost evanescent before apex, the sulci on either side, therefore, blending near apex. Beneath rather coarsely, sparsely punctured, finer and closer on three anal segments. Length including rostrum, 3.75 mm.; breadth, 1.25 mm.

Holotype (No. 2471, Mus. Calif. Acad. Sci.), and several designated paratypes from a series of twenty-eight specimens. My types were collected at **Los Angeles**, **California**, many years ago. Others are from Saticoy, Ventura County, and Santa Barbara, California. It breeds commonly in the decay-

<sup>6</sup> Proc. Ent. Soc., Washington, XXVII (1925), p. 141.

ing branches of willow, alder, walnut, and similar trees in company with *Rhyncolus angularis* Lec.

This species is larger than any of the species listed from eastern North America except Codiosoma (Phlæophagus) spadix (Herbst.) and is readily separated from that by being elongate subparallel and not pilose. It is also separated from Phlæophagus apionides Horn and variolatus Dury by its larger size as well as sparser pronotal punctation. From Phlæophagus minor Horn which it was questionably determined as many years ago, it differs by being larger, with rostrum broader at base and not dilated apically, by having the eyes more prominent, prothorax less narrowed forward, and much coarser punctation, especially of pronotum.

### Phlœophagus canadensis Van Dyke, new species

Similar in general appearance to *californicus* but a bit larger, more robust; the rostrum less dilated, eyes hardly projecting beyond side margins of head, first segment of funicle as broad as long, prothorax more robust and inclined to have sides somewhat parallel at middle, elytra more attenuated posteriorly and the two outer longer elytral intervals, eighth and ninth, carinate posteriorly, the outermost reaching the apex. Length including beak, 4 mm.; breadth, 1.5 mm.

Holotype (No. 2472, Mus. Calif. Acad. Sci.), and three paratypes collected by Mr. F. S. Carr at **Medicine Hat, Alberta, Canada,** from decaying cottonwood, *Populus*, June 20, 1926. I have also seen another specimen taken at Victoria, British Columbia, by Mr. G. A. Hardy.

# ON THE IDENTITY OF ACIDALIA BALISTARIA GN. (LEPID., GEOMETRIDÆ)

BY WILLIAM BARNES AND F. H. BENJAMIN

Decatur, Illinois

This species was described by Guenée, 1857, Sp. Gén., IX, 453, from 3 å, 1 ♀, Collections Boisduval and Lefebvre. There is a female in the Barnes collection labeled "Typicum Specimen," "Ex Musæo Ach. Guenée." This agrees well with the original description and is the species going in collections as rufescens Hlst. The Guenée name has priority. Acidalia balistaria Auct. nec Gn. becomes Euacidalia perirrorata Pack.